

OPP Identifier Number

<b> €EPA</b>		United States Environmental Protection Agency Washington, DC 20460				Regis Amend Other	dment		
			Applicat	ion for F	esticide	- Section	on I	<b>-</b> 100 mm	
1. Company/Product <b>89285-E</b> 4. Company/Product					2. EPA Prod Linda F	duct Manag			B. Proposed Classification  None Restricted
IRF135					91/Biod	hemic	al/BPPI	D	
5. Name And Address Of Applicant (Include ZIP Code)  Isagro USA, Inc.  430 Davis Drive, Suite 240  Morrisville, NC 27560  Check if this is a new address			ode)	6. Expedited Review. In accordance with FIFRA Section 3(c) (b)(i), my product is similar or identical in composition and labelii to:  EPA Reg. No  Product Name			composition and labeling		
				Sec	ction II				
Explanation: Use a PRIA Category  Pre-payment of	n respon xplain be additiona B672.1	nse to Agency letter da elow. al page(s) if necessary I – <b>New product,</b>	/. (For section unregiste	red sour	Ager "Me Other	ncy letter da Too" Applio r – Explain	Below.	ated Augus	st <b>29, 2012</b> for details. 727408; Transaction
				Sec	tion III				
1. Material This Prod	uct Will	Be Packaged In:							
Child Resistant Pack Yes* No * Certification made submitted	No No No. per		No. per Container	☐ Y ☐ N	Yes X			Plastic Glass Paper	
3. Location of Net Co	ontents In		4. Size(S) R	tetail Contain 40 – 168			5. Locat	ion of Label D On Label On Labelin	pirections g accompanying product
6. Manner in Which L	abel is A	Affixed to Product	Lithogra Pager g Stencile	glued		Othe	er		
					tion IV				
Contact Point (Contact Point)     Name     Mel Graben / mgra		ems directly below for agro-usa.com	identification	Title	to be contac ry Manager	ted, if nece	ssary, to pr		e No. (Include Area Code)
	dge that	tements I have made any knowingly false o ole law.		and all attach					6. Date Application Received (Stamped)
2. Signature	Ø	Hlus		3. Title Regulato	ry Consult	ant / arob	erts@tsg	jusa.com	
4. Typed Name Amy	Plato I	Roberts		5. Date	August 29	, 2012		AAA	

## **Technology Sciences Group Inc.**

712 Fifth St., Suite A
Davis, CA 95616
Direct in CA: (530) 757-1432

Direct in CA: (930) 757-1432 Direct in DC: (202) 828-8964 Fax: (530) 757-1299

E-Mail: aroberts@tsgusa.com

Amy Plato Roberts Senior Regulatory Consultant

Linda Hollis, Chief, Biochemical Pesticides Branch Biopesticides and Pollution Prevention Division (7511P) Office of Pesticide Programs, EPA One Potomac Yard 2777 South Crystal Drive Arlington, VA 22202 August 29, 2012

RE:

IRF135 (EPA File Symbol 89285-E)

B672.1 Application for new product, unregistered source

Dear Ms. Hollis:

Enclosed with this letter you will find the following in support of a new formulated enduse product, with an unregistered source:

- Application form;
- 2) Copy of PRIA fee prepayment;
- Copy of letter of meeting minutes from May 24, 2011 and Agency letter of concurrence dated July 6, 2011;
- 4) Confidential Statement of Formula:
- 5) Certification with Respect to Citation of Data form;
- 6) Data Matrix, including a publicly releasable "blacked-out" version;
- 7) Five (5) copies of the product label:
- 8) Data Volumes 1 through 4 refer to the Transmittal Document for a complete listing of data volume titles and corresponding OCSPP Guideline Numbers.

Please note the following with regards to this application:

#### Identity of the Product

IRF135, containing the biochemical active ingredient allyl isothiocyanate (AITC), is a formulated end-use product for use as a pre-plant soil treatment for the control of soil borne fungi, nematodes, weeds and insects. The product will be soil-applied only, as a pre-plant shank injection, broadcast/flat fume application, or raised bed application either shank injected into the row or injected through the drip irrigation system to field or greenhouse soils. All applications are prior to planting crops, so this is a non-food use pesticide product.

Washington, D.C. 1150 18<sup>th</sup> St., NW, Suite 1000 Washington, D.C. 20036 Phone: (202) 223-4392 California 712 Fifth St., Suite A Davis, CA 95616 Phone: (530) 757-1245 Canada 275 Slater St., Suite 900 Ottawa, Ontario K1P 5H9 Phone: (613) 247-6285



## **Product Chemistry Data**

A complete set of product chemistry data for an EP is submitted with this application – refer to Volume 2 of this submission. In addition, product-specific physical and chemical characteristics data is included in a separate data volume – refer to Volume 3 of this submission.

## **Human Health Toxicity Data**

Rationales for no further testing have been submitted for all required acute toxicity data requirements – refer to Volume 4 of this submission. Rationales are based on data available on the Technical Grade Active Ingredient, the inert ingredient, and the anticipated exposure to workers and handlers.

## **E-Dossier Submission Pilot**

With the assistance of ITRMD (Bob Schultz) this label amendment and related tolerance exemption petition are being submitted electronically through the e-Dossier Submission Pilot. If you have any difficulty with the electronic submission of the information, please do not hesitate to let me know.

With this application we believe all biochemical pesticide Tier 1 data requirements for new product have been fulfilled. Let me know if there are any questions or comments.

Regards,

**Amy Plato Roberts** 

Regulatory Consultant for Isagro USA Inc.

Direct dial (530) 757-1432; aroberts@tsgusa.com

## **VOLUME 1 OF 4 OF SUBMISSION**

## TRANSMITTAL DOCUMENT

#### NAME AND ADDRESS OF SUBMITTER:

Isagro USA, Inc. 430 Davis Drive, Suite 240 Morrisville, NC 27560

## **REGULATORY ACTION:**

PRIA B672 Application for Registration of IRF135 (EPA File Symbol 89285-E)

#### TRANSMITTAL DATE:

August 29, 2012

## LIST OF SUBMITTED STUDIES:

MRID NUMBER	VOLUME NUMBER	EPA STUDY TITLE	OCSPP GUIDELINE NUMBER
	1 of 3	(Transmittal Document)	
489194 -01	2 of 3	Product Chemistry for IRF135	880.1100-1400 830.1700-1800 830.6302-7300
489194 -02	3 of 4	Physical and Chemical Properties for IRF135	830.6315, 830.7000 830.7100, 830.7300
489194 -03	4 of 4	Response to Tier 1 Biochemical Data Require for IRF135	ements see title page

**COMPANY NAME:** 

Isagro USA, Inc.

**COMPANY OFFICIAL:** 

Amy Plato Roberts, Regulatory Agent

**COMPANY CONTACT:** 

**Amy Plato Roberts** 

Technology Sciences Group Inc.

712 Fifth Street, Suite A, Davis, CA 95616

Tel. (530) 757-1432; email: aroberts@tsgusa.com



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 1200 Pennsylvania Avenue, N.W. WASHINGTON, D.C. 20460

to this address.		
Certification with Respec	et to Citation of I	Data
Applicant's/Registrant's Name, Address, and Telephone Number Isagro USA, Inc. 430 Davis Drive, Suite 240 Morrisville, NC 27560		EPA Registration Number/File Symbol  82985-E
Active Ingredient(s) and/or representative test compound(s)  Allyl isothiocyanate		Date August 29, 2012
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158)  Terrestrial, non-food use		Product Name IRF135
NOTE: If your product is a 100% repackaging of another purchased EPA-registe submit this form. You must submit the Formulator's Exemption Statement (EPA Form		r all the same uses on your label, you do not need to
I am responding to a Data-Call-In Notice, and have included with this fo should be used for this purpose).	rm a list of companie	es sent offers of compensation (the Data Matrix form
SECTION I: METHOD OF DATA SUP	PORT (Check one	method only)
I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).	under	sing the selective method of support (or cite-all option the selective method), and have included with this form a eted list of data requirements (the Data Matrix form must ad).
SECTION II: GENERAL	OFFER TO PAY	
[Required if using the cite-all method or when using the cite-all option under the s	ard to the approval of	
SECTION III: CER	TIFICATION	
I certify that this application for registration, this form for reregistration, or the application for registration, the form for reregistration, or the Data-Call-In response. In indicated in Section I, this application is supported by all data in the Agency's files that substantially similar product, or one or more of the ingredients in this product; and (2) is requirements in effect on the date of approval of this application if the application souguses.  I certify that for each exclusive use study cited in support of this registration.	addition, if the cite-all (1) concern the prope s a type of data that w ht the initial registration	option or cite-all option under the selective method is rities or effects of this product or an identical or rould be required to be submitted under the data on of a product of identical or similar composition and
the written permission of the original data submitter to cite that study.  I certify that for each study cited in support of this registration or reregistrat submitter; (b) I have obtained the permission of the original data submitter to use the s have expired for the study; (d) the study is in the public literature; or (e) I have notified compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA; compensation, if any, to be paid for the use of the study.	tudy in support of this in writing the company	application; (c) all periods of eligibility for compensation y that submitted the study and have offered (l) to pay
I certify that in all instances where an offer of compensation is required, co accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be evidence to the Agency upon request, I understand that the Agency may initiate action FIFRA.	e submitted to the Age	ency upon request. Should I fail to produce such
I certify that the statements I have made on this form and all attachme Knowingly false or misleading statement may be punishable by fine or imprison		
Signature	August 29, 2012	Typed or Printed Name and Title Amy Plato Roberts, Regulatory Consultant

Form Approved OMB No. 2070-0060

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460

	DA	TA MATRIX			
Date August 29, 2012			EPA Reg. No./File Syml 89285-E	ool	Page 1 of 4
Applicant's/Registrant Name and Isagro USA, Inc. 430 Davis Drive, Suite 24 Morrisville, NC 27560		Product IRF135			
Ingredient Allyl isothiocya	nate		and the second	4000	
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
OCSPP 880.1100	Product Identity and Composition	489194-01	Isagro USA, Inc.	OWN	
OCSPP 880.1200	Description of Starting Materials, Production and Formulation Processes	489194-01	Isagro USA, Inc.	OWN	
OCSPP 880.1400	Discussion of the Formation of Impurities	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.1700	Preliminary Analysis	488241-02	Isagro USA, Inc.	OWN	
OCSPP 830.1750	Certified Limits	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.1800	Enforcement Analytical Method	488241-02	Isagro USA, Inc.	OWN	
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OCSPP 830.6302	Color	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.6303	Physical State	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.6304	Odor	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.6313	Stability at Normal and Elevated Temperatures, Metals and Metal Ions	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.6315	Flammability	489194-02	Isagro USA, Inc.	OWN	
Signature			Name and Title Amy Plato Roberts, Re	egulatory Agent	Date August 29, 2012

Form Approved OMB No, 2070-0060

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Ingredient Allyl isothiocya	nate				
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
OCSPP 830.6317	Storage Stability	489194-01	Isagro USA, Inc.	OWN	Secretary of the second
OCSPP 830.6319	Miscibility	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.6320	Corrosion Characteristics	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.7000	PH	489194-02	Isagro USA, Inc.	OWN	
OCSPP 830.7050	UV/Visible Light Absorption	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.7100	Viscosity	489194-02	Isagro USA, Inc.	OWN	
OCSPP 830.7200	Melting Point / Melting Range	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.7220	Boiling Point / Boiling Range	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.7300	Bulk Density	489194-02	Isagro USA, Inc.	OWN	
OCSPP 830.7520	Particle Size, Fiber Length and Diameter Distribution	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.7550, 7560, 7570	Partition Coefficient (n-Octanol/Water)	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.7840	Water Solubility	489194-01	Isagro USA, Inc.	OWN	
OCSPP 830.7950	Vapor Pressure	489194-01	Isagro USA, Inc.	OWN	
Signature			Name and Title Amy Plato Roberts, Re	gulatory Agent	Date August 29, 2012

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Applicant's/Registrant Name and Address Isagro USA, Inc. 430 Davis Drive, Suite 240 Morrisville, NC 27560		Isagro USA, Inc. 430 Davis Drive, Suite 240		Product IRF135			
Ingredient Allyl isothiocya	nate						
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note		
OCSPP 870.1100	Acute Oral Toxicity	489194-03	Isagro USA, Inc.	OWN			
OCSPP 870.1200	Acute Dermal Toxicity	489194-03	Isagro USA, Inc.	OWN			
OCSPP 870.1300	Acute Inhalation Toxicity	489194-03	Isagro USA, Inc.	OWN			
OCSPP 870.2400	Primary Eye Irritation	489194-03	Isagro USA, Inc.	OWN			
OCSPP 870.2500	Primary Dermal Irritation	489194-03	Isagro USA, Inc.	OWN			
OCSPP 870.2600	Dermal Sensitization	489194-03	Isagro USA, Inc.	OWN			
OCSPP 870.3100	90-Day Oral	488241-08	Isagro USA, Inc.	OWN	Data submitted for TC		
OCSPP 870.3250	90-Day Dermal	488241-08	Isagro USA, Inc.	OWN	Data submitted for TGAI		
OCSPP 870.3465	90-Day Inhalation	488241-08	Isagro USA, Inc.	OWN	Data submitted for TGAI		
OCSPP 870.3700	Prenatal Developmental	488241-08	Isagro USA, Inc.	OWN	Data submitted for TGAI		
OCSPP 870.5100	Bacterial Reverse Mutation Test	488241-08	Isagro USA, Inc.	OWN	Data submitted for TGAI		
OCSPP 870.5300, 5375	In vitro Mammalian Cell Assay	488241-08	Isagro USA, Inc.	OWN	Data submitted for TGAI		
Signature	March States	A SECTION OF THE SECT	Name and Title Amy Plato Roberts, Re	egulatory Agent	Date August 29, 2012		

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DATA MATRIY

		DATAMATRIX			
Date August 29, 2012			EPA Reg. No./File Symbo 89285-E	ol	Page 4 of 4
Applicant's/Registrant Name and Address Isagro USA, Inc. 430 Davis Drive, Suite 240 Morrisville, NC 27560		Product IRF135			
Ingredient Allyl isothiocya	nate	HI LAND BEAUTY			
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
OCSPP 850.2100	Avian Acute Oral Toxicity	488241-08	Isagro USA, Inc.	OWN	Data submitted for TGAI
OCSPP 850.2200	Avian Dietary Toxicity	488241-08	Isagro USA, Inc.	OWN	Data submitted for TGAI
OCSPP 850.1075	Fish Acute Toxicity	488241-08	Isagro USA, Inc.	OWN	Data submitted for TGAI
OCSPP 850.1010	Aquatic Invertebrate Acute Toxicity	488241-08	Isagro USA, Inc.	OWN	Data submitted for TGAI
OCSPP 850.4100	Terrestrial Plant Toxicity, Seedling Emergence	488241-08	Isagro USA, Inc.	OWN	Data submitted for TGAI
OCSPP 850.4150	Terrestrial Plant Toxicity, Vegetative Vigor	488241-08	Isagro USA, Inc.	OWN	Data submitted for TGAI
OCSPP 880.4350	Nontarget Insect Testing	488241-08	Isagro USA, Inc.	OWN	Data submitted for TGAI
Signature			Name and Title Amy Plato Roberts, Re	gulatory Agent	Date August 29, 2012
PA Form 8570-35 (9-97) Electronic	and Paper versions available. Submit only Paper version		Agency Intern	nal Use Copy	

-PA Form 8570-35 (9-97) Electronic and Paper versions available. Submit only Paper versior

Form Approved	OMB No.	2070-0060
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		DATA MATRIX			
Date August 29, 2012  Applicant's/Registrant Name and Address Isagro USA, Inc. 430 Davis Drive, Suite 240 Morrisville, NC 27560			EPA Reg. No./File Symbol 89285-E		Page 1 of 4
			Product IRF135		
Ingredient Allyl isothiocyar	nate				
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Isagro USA, Inc.	OWN	
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			Isagro USA, Inc.	OWN	
Signature	F_CIIRANI	CION	Name and Title Amy Plato Roberts, Re	gulatory Agent	Date August 29, 2012

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#### DATA MATRIX Date August 29, 2012 EPA Reg. No./File Symbol Page 2 of 4 89285-E Applicant's/Registrant Name and Address Product Isagro USA, Inc. 430 Davis Drive, Suite 240 **IRF135** Morrisville, NC 27560 Ingredient Allyl isothiocyanate **Guideline Reference Number Guideline Study Name MRID Number** Submitter Status Note Isagro USA, Inc. OWN Name and Title Amy Plato Roberts, Regulatory Agent August 29, 2012

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Ingredient Allyl isothiocya	nate					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
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Signature			Name and Title Amy Plato Roberts, Re	egulatory Agent	Date August 29, 2012	

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			IRF135		
Morrisville, NC 27560					
Ingredient Allyl isothiocya					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Isagro USA, Inc.	OWN	Data submitted for TGA
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			Isagro USA, Inc.	OWN	Data submitted for TGA
			Isagro USA, Inc.	OWN	Data submitted for TGA
Signature			Name and Title Amy Plato Roberts, Re	gulatory Agent	Date August 29, 2012

## **IRF135**

(Alternate Brand Name: "Dominus")

For Agricultural and General Soil Treatment Use

A BROAD SPECTRUM MULTI-PURPOSE PRE-PLANT SOIL TREATMENT FOR THE CONTROL OF CERTAIN SOIL BORNE FUNGI, NEMATODES, WEEDS and INSECTS

**ACTIVE INGREDIENT:** 

Contains 8.19 lbs. active ingredient (allyl isothiocyanate) per gallon. This product weighs 8.5 lbs.

per gallon.

# DANGER

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

FIRST AID
<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing.</li> <li>Call a poison control center or physician for treatment advice.</li> </ul>
<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 minutes.</li> <li>Call a poison control center of doctor for treatment advice.</li> </ul>
<ul> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything to an unconscious person.</li> <li>Call a poison control center or physician for treatment advice.</li> </ul>
<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice</li> </ul>

#### **NOTE TO PHYSICIAN**

Probably mucosal damage may contraindicate the use of gastric lavage.

#### **HOTLINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For Chemical Emergency Spill Leak Fire Exposure or Accident Call CHEMTREC Day or Night Domestic North America 800-424-9300 International 703-527-3883 (collect calls accepted).

EPA Reg. No. (pending as File Symbol 89285-E)

EPA Est. No. XXXXX-XXX-XXX

**Net Contents:** 

(Batch Code/Lot No: will be placed on the container)

Manufactured for: Isagro USA, Inc. 430 Davis Drive. Suite 240

E-SUBMISSION

## PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER.** Corrosive. Causes irreversible eye damage and skin burns. May be fatal if swallowed, absorbed through skin, or inhaled. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before use.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

When performing activities without the potential for liquid contact all handlers (including applicators) must wear:

- · Coveralls worn over long sleeve shirt and long pants
- · Chemical-resistant footwear plus socks
- · Chemical-resistant (such as nitrile or butyl) gloves
- · Protective eyewear

Where liquid contact is a potential all handlers (including mixers, loaders and applicators) in addition to the above listed PPE must wear:

An air purifying respirator with an organic-vapor removing cartridge with pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE pre-filter.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard any clothing and or PPE that have been drenched or heavily contaminated with this product's concentrate. Do not reuse clothing or PPE that has been drenched or heavily contaminated.

#### **ENGINEERING CONTROLS**

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides, the handler PPE requirements may be reduced or modified as specified in the WPS.

## **USER SAFETY RECOMMENDATIONS**

- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

For terrestrial uses only. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

## **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirement specific to your State or Tribe, consult the State/Tribal agency responsible for pesticide regulation.

#### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box apply to uses of this product that are covered by the Worker. Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of forty-eight (48) hours unless wearing appropriate PPE.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Protective eyewear
- · Chemical-resistant gloves, (such as nitrile or butyl)
- Footwear plus socks

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

EXCEPTION: If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

#### **USE PRECAUTION**

The product must only be used in a well-ventilated area. Do not use IRF135 if it cannot be applied according to the use patterns on the label.

#### **USE DIRECTIONS**

Apply IRF135 as a preplant soil treatment only and as part of an integrated pest management (IPM) program to aid in reducing or controlling the damaging effects of soil borne pests and diseases.

#### **Soil Treatment Application Methods**

Apply as a preplant shank injection, broadcast/flat fume application, or raised bed application either shank injected into the row or injected through the drip irrigation system. Specific

directions for each application method follow label instructions to achieve optimum performance

## Planting Interval

- After application, leave the soil undisturbed for at least 10 days after application.
- Cold, wet, or cold and wet soils can decrease dissipation of IRF135 and can require a longer soil exposure period.
- For tarped applications, tarp perforation 24 to 48 hours prior to planting can be necessary to assist in IRF135 dissipation.
- Aeration is usually complete when IRF135 odor is no longer detectable. See label section on the use of Jar Seedling and/or Transplant tests for safety steps taken prior to planting target crop.

## **General Soil Treatment Application Rates**

**Number of applications per year:** IRF135 may be applied to soil as a pre-plant soil treatment prior to planting with subsequent applications allowable to the same soil within the same year provided the previous crop is completely harvested prior to application.

Open field: Use 10 - 40 gallons of IRF135 per one acre (85 - 340 lb/A).

**Greenhouse:** Use 10 - 40 gallons of IRF135 per one acre (85 - 340 lb/A) or  $0.23\text{gal} / 1,000\text{ft}^2 - 0.92 \text{ gal} / 1,000\text{ft}^2$ .

**TABLE 1. PREPLANT SOIL APPLICATION RATES** 

TREATMENT SITE	BROADCAST EQUIVALENT RATES GAL/A*	BROADCAST EQUIVALENT RATES (LBS PRODUCT/A
Field soils to be planted to: Asparagus, brassica vegetables (broccoli, cauliflower), cereal grains, cucurbit crops (cucumber, squash, melons), fruiting vegetables (e.g. eggplant, peppers, tomatoes), herbs and spices, leek, leafy vegetables (lettuce), legume vegetables, pineapples, root and tuber vegetables (carrot, garlic, onion, potato, sweet potato)	10 - 40	85 - 340
Field soils to be planted to: Strawberries, berries (cane fruit), fruit and nut crops, citrus, pome fruit trees, stone fruit trees, tree nuts, tropical and subtropical fruits, vineyards	10 - 40	85 - 340
Nursery, Turf, and Ornamental Soils to be planted to: Turf, lawns, parks, golf greens, athletic fields, recreational turf area, ornamentals, floral crops, forest tree seedlings	10 - 40	85 - 340
Greenhouse soils to be planted to: Food and Non-food crops	10 - 40	85 - 340

Seed or Transplant beds to be planted to:, Food crops and non-food crops	10 - 40	85 - 340
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\*Use the higher labeled rates for muck and heavy clay soils, as well as for those pests and or diseases such as cyst forming nematodes, *Macrophomina, Fusarium or Phytophthora* or hard coated weed seeds for example Malva, Clover or Nutsedge

#### **APPLICATION DIRECTIONS**

Soil temperature: maximum of 90°F at application depth

## Soil preparation:

- Ensure the soil is well prepared and generally free at the surface of large clods. Large clods can prevent efficient soil sealing and reduce effectiveness of the product.
- Cultivate the soil to a minimum depth of 5-8" and or equal to the desired treatment depth.
- Thoroughly incorporate plant residues into the soil to allow decomposition prior to treatment.
   Leave little or no plant residue present on the soil surface. Undecomposed plant material can harbor pests that will not be controlled and can interfere with the soil seal after application. Let crop residue that is present lie flat to permit the soil to be sealed effectively.
- Where applicable, fracture compacted soil layers (plow pans) within the desired treatment zone before or during application of IRF135.
- Deviation from the above soil preparation conditions can result in less than satisfactory results.

#### Soil moisture:

- It is critical to maintain adequate soil moisture before, during and 48 hours post-treatment.
   Plan soil treatment for seasons, crop rotations, or irrigation schedules which leave adequate moisture in the soil.
- The soil must be moist (typically with enough moisture to allow weed seeds to become imbibed) from 1.5 inches below the soil surface to at least the minimum desired depth of the target treatment zone. The amount of moisture needed (typically greater than 50% Available Water Content at 9 inches) in this zone will vary according to soil type. The surface soil generally dries very rapidly and is not considered in this determination.

## **Weather Conditions:**

- Prior to soil treatment the weather forecast for the day of application and the 48-hour period following the soil treatment must be checked to determine if unfavorable weather conditions exist or are predicted and whether soil treatment should begin.
- Apply IRF135 in the presence of wind speeds of at least 2 mph at the start of the applications or projected to reach at least 5 mph during the application.
- Check weather forecasts 48 hours prior to application to ensure proper conditions are present at the time of application. Weather conditions and or advisories can be downloaded online at http://www.nws.noaa.gov.

**Buffer Zones:** Do not apply IRF135 within 25' of any occupied structure, such as a school, daycare, hospital, retirement home, business or residence.

#### **Pre-Planting After Application of IRF135**

#### Effects of Rain:

• If significant rainfall occurs within 24 hours after IRF135 application (enough to saturate soil that has been treated with IRF135), a reduction in pest control can occur.

#### **Recontamination Prevention:**

• IRF135 will control pests that are present in the soil treatment zone at the time of soil treatment. It will not control pests that are introduced into the soil after soil treatment period has ended. To avoid re-infestation of treated soil, DO NOT use irrigation water, transplants, seed pieces, or equipment that could carry soil-borne pests from infested land. Avoid contamination from moving infested soil onto treated beds through cultivation, movement of soil from outside the treated zone, dumping contaminated soil in treated fields and soil contamination from equipment or crop remains. Clean equipment carefully before entering treated fields.

## **Testing of Treated Soils Prior to Planting:**

- Allow IRF135 to dissipate completely before planting the crop.
- When determining the appropriate time interval before planting, consideration of factors that impact IRF135 dissipation include rate of application, depth of injection, soil temperature, soil preparation and type, soil moisture and use of various plastic films and or water sealing.
- Use of a lettuce seed and or tomato/pepper transplant test can be used to determine if sufficient time has elapsed between soil treatment and planting as described below.

#### Lettuce Seed Test

- After a minimum of 7 days after application proceed with the following Seed Jar test.
- Use a trowel to dig into the treated soil to a depth at or just beneath the depth of IRF135 injection and remove 2 to 5 samples with enough soil to fill a quart sized jar half-way, mix lightly, apply moisture enough to germinate seeds, sprinkle seeds evenly over the soil surface and seal immediately with a lid for air tight conditions.
- Sample the field in several areas, especially those areas that are not representative of the general field conditions and or having higher moisture content, different soil texture or areas where rate delivery is different.
- Prepare another similar sample of untreated soil for comparison.
- Keep the jars out of direct sunlight and at a temperature of 65° to 85°F. (Direct sunlight
  can overheat and kill the seedlings). Lettuce seed will not germinate in the dark so place
  in diffuse sunlight.
- After 1 to 3 days, check each jar for seed germination.
- If seeds in the treated jar germinate and grow similar to the untreated soil sample then the treated area is safe for planting.

## Tomato/Pepper Transplant Test

- After a minimum of 7 days after application proceed with the following transplant test.
- Transplant 5 to 10 healthy, actively growing tomato or pepper seedlings into treated beds at normal planting depth and several locations within the treated area. If available repeat in an area of field not treated with IRF135 for comparison. If a wetter, heavier area of the treated field is available place the transplants there.

Inspect the transplants in 3 days for plant injury including wilt, chlorosis, or leaf and root
tip burn. Ensure that proper soil moisture conditions exist for transplants to remain free
from water stress. If plants in the treated area are asymptomatic and or are similar in
growth and appearance to plants in the non-treated area it is safe to plant.

## IRF135 Drip Injection Application: Additional Use Directions

#### **Drip Injection Use Precautions:**

- The following applies to drip (trickle) irrigation systems.
- Crop injury and a reduction in efficacy can result from non-uniform distribution of IRF135 in irrigation water used to treat soil.
- For questions related to equipment calibration, consult your local State Extension Service specialist, equipment manufacturer or dealer.

#### Soil preparation:

- Ensure compacted soil layers (plow pans) within the desired treatment zone are tilled and/or fractured if it is considered normal practice before application of IRF135 to ensure adequate soil drainage. Note that conditions where soil layers (plowpans) exist and are not tilled can result in reduced pest control, differences in planting interval or plant growth as a result of compacted or shallow soil conditions.
- The application site must be in seedbed condition. Ensure beds are listed, shaped and ready for planting.
- Ensure initial soil moisture is at ~50% of field capacity at 2 to 3 inches and down to 9 inches depth at the time of IRF135 application. Soil texture and amount of water to be applied will impact the desired initial % field capacity necessary for drip injection.

#### IRF135 Dosage:

- Determining IRF135 dosage is based on consideration of the intended crop to be planted, treated area conditions, preparation, application method, target pest, and soil type.
- Use drip emitters with spacing of 6 to 12 inches with shallow subsurface placement to ensure thorough wetting of the soil area being treated by IRF135 drip injection.
- IRF135 must be metered at a target concentration between 800 2000 ppm into the
  water supply line and passed through a mixing device such as a centrifugal pump with
  by-pass agitation or static mixer to assure proper agitation and mixing to a target
  concentration (ppm) for even distribution before distribution into the drip irrigation
  system. The concentration of IRF135 should not exceed 2000 ppm at any time during
  the injection period within the drip line.
- The volume of irrigation water to deliver to the treated area is dependent upon the soil type, % soil moisture or the % of field capacity at the start of the application and the target moisture level following application and equipment rising.
- Determine the irrigation water flow and adjust the flow rate of IRF135 to meet the target ppm in irrigation water. Insert a static mixer or similar device immediately after the IRF135 injection point to insure adequate mixing with the irrigation water.

#### General Chemigation Application Information:

- 1. Apply this product only through drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.
- 2. Crop injury or lack of effectiveness can result from non-uniform distribution of treated

water.

- 3. If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.
- 4. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 5. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

## **Chemigation Systems Connected to Public Water Systems:**

- 1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

#### For Drip (Trickle) Chemigation Systems:

- 1. The irrigation system (main line, headers, drip tape) must be thoroughly inspected for leaks before the application starts. The leak detection process requires that the irrigations system be at full operating pressure. The time required at full operating pressure will vary according to the system design and layout, soil type and target ppm concentration. Signs of leaks may include puddling along major pipes and at the top or ends of rows and/or on the bed surface or movement or shifting of beds due to bed collapse in over saturated conditions. Any leaks discovered must be repaired prior to application of IRF135. For leaks discovered during application of IRF135, immediately stop injection, wear all appropriate PPE and repair the line insuring that the problem is corrected before commencing with the drip applied injection.
- 2. The system must contain a functional check valve (back flow prevention device), vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. With use of injection pumps (e.g. Diaphragm or Centrifugal type pumps) the pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

- 7. To inject IRF135, use a metering device (such as a positive pressure system, positive displacement injection pump, diaphragm pump, or a Venturi system) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 8. Use of an inert gas such as nitrogen or dry compressed air is acceptable for use in a positive pressure system.

## Injection System Flush After IRF135 Application:

- After IRF135 injection, continue drip irrigation with clean water to flush remaining IRF135 completely out of the system. Apply 3 times the volume of water equivalent to the capacity of the drip injection system from the point of injection to the ends of the drip tape to ensure IRF135 is completely voided from the injection lines and drip tape.
- Do not allow any IRF135 to remain in the system after application.
- If common lines are used for both the IRF135 application and to apply the water seal (if applied), the lines must be adequately flushed before starting the water seal and/or normal irrigation practices.

## Soil Sealing or Tarp Use:

- When tarps are used with drip injection application, they must be in place prior to injection of IRF135.
- Tarp edges must be buried along the row furrow and at the ends of each row.

## **Untarped Drip Applications:**

• The drip tape must be buried a minimum of 5 inches below the soil/air interface.

#### Planting Interval:

- After application, leave the soil undisturbed for at least 10 days after application.
- Extremely cold, wet, or cold and wet soils can decrease dissipation of IRF135 and can require a longer soil exposure period.
- For tarped applications, tarp perforation 24 to 48 hours prior to planting can be necessary to assist in IRF135 dissipation.
- Aeration is usually complete when IRF135 odor is no longer detectable. See label section on the use of Jar Seedling and or Transplant tests for crop safety steps taken prior to planting target crop.

#### Requirements for Pre-Plant Greenhouse Soil Treatment

- Applications methods for use in greenhouse soil treatment may be applied as drip injection or tractor mounted shank where applicable according to the methods described for open field with exceptions listed below:
  - All applications must be tarped or double water sealed (delivered via overhead sprinkler)
  - During the application, keep doors, vents and windows to the outside open and keep fans or other mechanical ventilation systems running within the application
  - Areas by which gases could enter adjacent enclosed areas must be sealed prior to application and remain closed for up to 48hours post application.

## IRF135 Raised Bed and Broadcast Shank Applications: Additional Use Directions

#### Soil moisture:

• For tractor mounted shank applied treatments of IRF135 do not apply to dry soils. Target a soil moisture reading of 50% or greater Available Water Content to a depth of 8 to 9 inches present for at least 24 to 48 hours prior to and until the start of the application.

## Soil temperature at application:

· Maximum of 90°F at application depth.

## **Application Methods and Equipment:**

- Apply IRF135 using chisels spaced no more than 12 inches apart and no more than 3 outlets evenly spaced per chisel (rear and forward facing type shank). The top most outlet must be no less than 8 inches from the final air soil interface.
- For shank applications the use of tarps or a water cap does not eliminate the need to remove chisel traces. Use of a press board, ring roller or other device to effectively close chisel traces must be performed.

## **Application Depth:**

• The point of injection must be a minimum of 8 inches from the final soil/air interface. The point of deep injection must be at a minimum of 18 inches from the final soil/air interface. Use deeper placement when fumigating soil to be planted to deep-rooted plants, such as perennial fruit and nut crops, or to control deeply distributed pests.

Application Type	Injection depth	Single Sweep Chisel Spacing	Noble Plow Injector Outlet Spacing	Yetter Rig Injector Spacing	Tarped Type Sealing, Applied immediately after application*	Non-Tarped Type Sealing
Broadcast Shallow Shank	8-15 inches	6–12 inches Use of no more than 3 nozzles per sweep with 4-5 inches / nozzle and bottom nozzle at no more than 15 inches from soil surface	6–12 inches	4-6 inches	PE, VIF, TIF	Overhead sprinkler, water cap and or Roller/Packer to compact soil surface, disc or similar equipment at a 3-4 inch depth to thoroughly mix soil and close chisel traces
Broadcast Deep Shank	>17 inches	18- 24inches	NA	NA	NA	Roller/packer to compact soil surface

Raised Bed	8–15	6–12	NA	4-6 inches	PE, VIF, TIF	Overhead
shallow	inches	inches				Sprinkler,
shank or		Use of no				water cap
Strip		more than				and or
Application		3 nozzles				Roller/Packer
		per sweep				to compact
		with 4-5				soil surface,
		inches /				disc or
		nozzle and				similar
		bottom				equipment at
		nozzle at				a 3-4 inch
		no more				depth to
		than 15				thoroughly
		inches				mix soil and
		from soil				close chisel
		surface				traces

- PE = Polyethylene film
- VIF = Virtually Impermeable Film
- TIF = Totally Impermeable Film

## Prevention of End Row Spillage:

- Do not apply or allow IRF135 to spill onto the soil surface. Each injection line either needs a check valve located as close as possible to the soil injection point to avoid dripping or spillage. If a check valve system is not in place purge and drain the injection line prior to lifting the injection shanks from the ground.
- Only lift the injection shanks from the ground when the shut-off valve has been closed, and the IRF135 injection line has been depressurized to passively drain remaining IRF135 or when the system has been actively purged (e.g. via air compressor).

#### Injection Rig Calibration, Set-up, Repair, and Maintenance:

IRF135 application equipment must be calibrated and all control systems working properly. Proper calibration is critical to ensure IRF135 application rate and soil placement. Refer to the equipment manufacturer's instructions to properly calibrate the injection equipment. The equipment dealer, local Cooperative Extension Service, crop advisor or IRF135 dealer can provide assistance.

## **Pests Controlled From Soil Treatment Uses:**

## **Nematodes**

Common Name (if applicable)	Scientific Name
Pin nematode	Paratylenchus
Ring nematode	Mesocriconema (=Criconemoides,
	=Criconemella)
Root knot nematode	Meloidogyne
Root-lesion nematode	Pratylenchus
Spiral nematode	Helicotylenchus
Sting nematode	Belonolaimus
Stubby-root nematode	Paratrichodorus
Stem and bulb nematode	Tylenchus

Soil Borne Fungi

Common Name (if applicable)	Scientific Name	
Armillaria root rot	Armillaria mellea	
Charcoal rot	Macrophomina phaseolina	
Clubroot organism	Plasmodiophora	•
Corky root	Pyrenochaeta	
Fusarium wilt	Fusarium spp.	
	Phytophthora spp.	
	Pythium spp.	
	Rhizoctonia spp.	
	Sclerotium rolfsii	
Verticillium wilt	Verticillium dahliae	

Insects in the Soil at the Time of Treatment

Common Name (if applicable)	Scientific Name (if applicable)		
Cutworms			
Japanese beetles			
June beetles and larva			
Symphylan (centipedes)			
White grubs			
Wireworms			

#### Weeds

Common Name (if applicable)	Scientific Name
California burclover	Medicago lupulina
Common chickweed	Stellaria media
Common mallow	Malva neglecta
Common purslane	Portulaca oleracea
Field bindweed	Convolvulus arvensis
Grasses	
Morningglory spp.	Ipomoea spp.
Prostrate knotweed	Polygonum aviculare
Yellow nutsedge	Cyperus esculentus

Mollusks: Slugs and Snails.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

## PESTICIDE STORAGE

Store in original container in a cool, dry place.

## **PESTICIDE DISPOSAL**

Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### CONTAINER DISPOSAL for non-refillable containers

This is a non-refillable container. Do not reuse or refill this container. Empty the package completely and triple rinse container (or equivalent pressure rinse) promptly after emptying with water to be used for application. Then dispose of the empty container according to state and local regulations. Place in trash or offer for recycling if available or return it to the Seller, or, if allowed by state and local authorities, by burning. If burned stay out of smoke.

#### TRIPLE RINSING INSTRUCTIONS:

# For rigid, nonrefillable containers small enough to shake (with capacities equal to or less than 5 gallons):

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

# For rigid, non-refillable containers that are too large to shake (with capacities greater than 5 gallons):

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

#### PRESSURE RINSE PROCEDURE (all sizes):

Pressure rinse as follows: Empty the remaining contents into application equipment or a tank mix and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

#### CONTAINER DISPOSAL for rigid, refillable containers

Refillable container. Refill this container with IRF135 pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

#### LIMITATION OF WARRANTY AND LIABILITY

Read the entire label before using this product, including this Limitation of Warranty and Liability.

If the terms are not acceptable, return the product at once unopened for a refund of the purchase price.

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Directions for Use, subject to the inherent risks described below, when used in accordance with the Directions for Use under normal conditions.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ISAGRO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Buyers and Users of this product must be aware that there are inherent unintended risks associated to the use of this product, independent from the control of Isagro. These risks include, but are not limited to, weather conditions, soil factors, moisture conditions, diseases, irrigation practices, condition of the crop at the time of application, materials which are present in the tank mix with this product or prior to the application of it, cultural practices or the manner of use or application, all risks which are impossible to eliminate. The Buyers and Users should be aware that these factors may cause: ineffectiveness of the product, reduction of harvested yield of the crop (entirely or partially), crop injury or injury to non-target crops or plants or to rotational crops caused by carryover in the soil, resistance of the target weeds to this product. Therefore additional care, treatment and expense are required to take the crop to harvest.

If the Buyer does not agree with the acceptance of these risks, then THE PRODUCT SHOULD NOT BE APPLIED. To the extent consistent with applicable law, by applying this product the Buyer acknowledges and accepts these inherent unintended risks and AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

To the extent consistent with applicable law, ISAGRO or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product (including claims based in contract, negligence, strict liability, other tort or otherwise). To the extent consistent with applicable law, the exclusive remedy of the User or Buyer and the exclusive Liability of Isagro or Seller shall be the return of the purchase price of the product, or at the election of Isagro or Seller, the replacement of the product.

To the extent consistent with applicable law, this Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

Isagro or its Seller must have prompt notice of any claim so that an immediate inspection of Buyer's or User's can be made. To the extent consistent with applicable law, if Buyer and User do not notify Isagro or Seller of any claims, in proper time, it shall be barred from obtaining any remedy.

To the extent consistent with applicable law, Buyers and Users are deemed to have accepted the terms of this Limitation of Warranty and Liability, which may not be modified by any verbal or written agreement.